

## ABSTRACT

A catalyst used in the low-temperature pyrolysis of hydrocarbon-containing polymer materials, and being mainly intended for use in the recycling of rubber waste materials. The catalyst is prepared from a carbon-iron component in the form of microscopic carbon particles and ultra-dispersed iron particles. In order to increase the yield of light hydrocarbon fractions in the condensate and to bind substantially completely the sulphur in the products of the rubber pyrolysis, the catalyst further contains a metal-carbon component. This component consists of the product from the stripping and the pyrolysis of a dispersion that comprises at least one salt of a metal from the group VIII in the periodic table which is capable of decay upon heating in order to form an oxide, wherein the metal is selected from the group comprising iron, nickel and cobalt. The dispersion further includes a carbohydrate as well as a highly volatile solvent.

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